

## Claims:

1. A real-time information service system using a title bar, task bar and tray clock of Windows, comprising:
  - 5 means for displaying information received from a real-time information server on said title bar in real time;
  - means for displaying the information received from said real-time information server on said task bar in real time; and
  - 10 means for displaying the information received from said real-time information server on said tray clock in real time.
2. The real-time information service system as set forth in Claim 1, wherein said means for displaying the information received from said real-time information server on said title bar in real time is programmed to execute the steps of:
  - a) registering a real-time information service icon on a tray of a Windows system;
  - b) setting up items to be displayed on said title bar and other conditions by a user;
  - 20 c) entering an identification and password in said real-time information server;
  - d) logging in to said real-time information server;
  - e) monitoring task change and window transition events;
  - f) detecting variations in an active window;
  - 25 g) performing processes corresponding respectively to the detected variations in said active window;

- h) receiving a variety of real-time information from said real-time information server;
- i) searching for said active window and extracting a handle value corresponding to the searched window;
- 5       j) displaying the information received from said real-time information server on said title bar of said active window with the extracted handle value according to the conditions set up by the user;
- k) determining whether the user has clicked on the registered real-time information service icon on said tray;
- 10      l) displaying a menu window;
- m) selecting registered information or help information in the displayed menu window;
- n) outputting a preset message;
- o) editing the contents of said title bar;
- 15      p) setting output forms;
- q) ending connection to said real-time information server;
- r), if the connection to the real-time information server is not ended, returning to said step e) of monitoring the task change and window transition events; and
- 20      s), if the connection to the real-time information server is ended, ending an associated program and restoring the current values to the original values.

3. The real-time information service system as set forth in Claim 1, wherein said means for displaying the information received from said real-time information server on said title bar in real time is programmed to extract a handle value of an active window, replace title bar information of said active

window with the information received from said real-time information server, restore title bar information of a current window into the original state if said active window is changed from the current window to a different window and provide a part for controlling the type of registered information and real-time

5 display information, in the form of an icon on a tray of a Windows system for the user's convenience, thereby allowing a user to control the type of desired information according to his or her preference using the provided tray icon.

4. The real-time information service system as set forth in Claim 1, 10 wherein said means for displaying the information received from said real-time information server on said task bar in real time is programmed to execute the steps of:

- a) creating an additional tool bar window on said task bar;
- b) setting up items to be displayed on said task bar and other conditions 15 by a user;
- c) entering an identification and password in said real-time information server;
- d) logging in to said real-time information server;
- e) determining whether the user has operated a left button of a mouse;
- f) gaining access to said real-time information server and providing 20 detailed information from said server to a screen;
- g) receiving a variety of real-time information from said real-time information server;
- h) displaying the information received from said real-time information 25 server on said task bar according to the conditions set up by the user;
- i) determining whether the user has operated a right button of the mouse;

- j) displaying a menu window;
- k) selecting registered information or help information in the displayed menu window;
- 5 l) outputting a preset message;
- m) editing the contents of said task bar;
- n) ending connection to said real-time information server;
- o), if the connection to said real-time information server is not ended, returning to said step e) of determining whether the user has operated the left button of the mouse; and
- 10 p), if the connection to said real-time information server is ended, ending an associated program and restoring the current values to the original values.

5. The real-time information service system as set forth in Claim 4, wherein said step i) of determining whether the user has operated the right 15 button of the mouse, said step j) of displaying the menu window, said step k) of selecting the registered information or help information in the displayed menu window and said step m) of editing the contents of said task bar are executed to control the display of information on said task bar.

20 6. The real-time information service system as set forth in Claim 4, wherein said step k) of selecting the registered information or help information in the displayed menu window, said step m) of editing the contents of said task bar, said step n) of ending the connection to said real-time information server and said step p) of, if the connection to said real-time information server is 25 ended, ending the associated program and restoring the current values to the original values are executed to perform commands associated with menu items

selected by the user.

7. The real-time information service system as set forth in Claim 1, wherein said means for displaying the information received from said real-time information server on said tray clock in real time is programmed to execute the 5 steps of:

- a) setting up items to be displayed on said tray clock and other conditions by a user;
- b) entering an identification and password in said real-time information server;
- c) logging in to said real-time information server;
- d) receiving a variety of real-time information from said real-time information server;
- e) displaying the information received from said real-time information server on said tray clock;
- f) determining whether a mouse is positioned on said tray clock;
- 10 g) determining whether the user has double-clicked on said tray clock with a left button of the mouse;
- h) determining whether the user has clicked on said tray clock with the left button of the mouse;
- i) ending a tray system; and
- 20 j) executing and ending general information query and transaction programs.

8. The real-time information service system as set forth in Claim 7, 25 wherein said step f) of determining whether the mouse is positioned on said tray clock, said step g) of determining whether the user has double-clicked on said

tray clock with the left button of the mouse, said step h) of determining whether the user has clicked on said tray clock with the left button of the mouse, said step i) of ending the tray system and said step j) of executing and ending the general information query and transaction programs are executed to control the  
5 display of information on said tray clock.

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